## **REMARKS**

The Examiner has rejected claim 24 as being anticipated by Killion.

Claim 24 includes: "providing transfer <u>functions</u> between the microphone and a hearer" (emphasis added). However, as seen for example in FIG. 1 of Killion, there is <u>only one</u> function between <u>a microphone</u> and the hearer. Killion basically switches between microphones (each associated with a single transfer function), not between transfer functions associated with a microphone. Killion lacks at least this element.

It is respectfully submitted that claim 24 is allowable.

The Examiner has rejected claim 20 as being anticipated by Killion.

Claim 20 includes: "time-based transitions". However, the transitions of Killion are not time-based. This is clearly shown, for example, in FIGS. 10-12 of Killion. The axes are of voltage and sound pressure level; no time-based transitions are indicated. Killion lacks at least this element.

It is respectfully submitted that claim 20 is allowable.

The Examiner has also rejected claims 21 and 22 as being anticipated by Killion.

Claims 21 and 22 require "low pass" and "ramp" characteristics, respectfully. These are both time-based transitions in that the response varies based on how much time has passed since the transition started. The Examiner contends that that reads on the logarithmic amplifier of Killion. It is simply not true that a logarithmic amplifier is a similar device. A logarithmic amplifier simply takes the logarithm of the input; thus it merely compresses the input value. For example, input=1, output=log(1)=0; input=10, output=log(10)=1; input=100, output=log(100)=2; . . . . There is no dependency on time.

It is respectfully submitted that claims 21 and 22 are allowable.

The Examiner has rejected claims 1-12, 1/19, 2/19, 3/19, 4/19, 5/19, 6/19, 7/19, 8/19, 9/19, 10/19, 11/19, 12/19 and 20-24 as being unpatentable over Jensen in view of Killion et al.

Jensen teaches the transition from directional to omnidirectional programs in a hearing aid. A time value T, related to the delay between a front and a rear microphone, is used to maintain amplitude, time delay and phase constant during the transition (see, Abstract).

There is <u>fixed</u> transfer function for the omnidirectional case and <u>fixed</u> transfer function for the directional case. Jensen only deals with the transition between these fixed transfer functions.

Jensen has no teaching of how to perform a time-based transition of <u>parameters</u> <u>within</u> the transfer functions, effectively changing the transfer function, nor is there a teaching of the use of a bi-level switching state value to make such a transition.

Killion et al., discussed above, also does not teach such elements.

Jensen and Killion et al. cannot be combined to form the present invention.

Further, as discussed above the logarithmic amplifier of Killion is not relevant to the claimed invention.

It is respectfully submitted that claims 1-12, 1/19, 2/19, 3/19, 4/19, 5/19, 6/19, 7/19, 8/19, 9/19, 10/19, 11/19, 12/19 and 20 24 are patentable over Jensen in view of Killion et al.

The Examiner has rejected claims 13-18, 13/19, 14/19, 15/19, 16/19, 17/19 and 18/19 as being unpatentable over Jensen in view of Killion et al. in further view of Ruegg.

Ruegg does not teach performing a time-based transition of parameters within the transfer functions, effectively changing the transfer function.

Jensen, Killion et al. and Ruegg cannot be combined to form the present invention.

It is respectfully submitted that claims 13-18, 13/19, 14/19, 15/19, 16/19, 17/19 and 18/19 are patentable over Jensen in view of Killion et al. in further view of Ruegg.

In view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance and notification of same is requested.

If there are any additional fees resulting from this communication which are not covered by an enclosed check, please charge same to our Deposit Account No. 16-0820, our Order No. 34152.

Respectfully submitted,

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